



Getting to Zero Waste – GreenGov Panel

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SNL/NM Pollution Prevention



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Vision

Go Full Circle

- The P2 program promotes and integrates environmental sustainability into all Sandia operations.
 - To promote and integrate environmental sustainability, the P2 program will seek to achieve 100 percent recycling of all recyclable commodities

Reduce, Reuse, Recycle, **Buy Green**



“Zero Waste to the Landfill by 2025”

**Goal adopted by the Pollution Prevention
group within Sandia/NM in FY08**

- **Scope of Goal**
- **What’s Needed**
- **Recent Performance**
- **Recycle Stream Assessments**
- **Moving Forward**

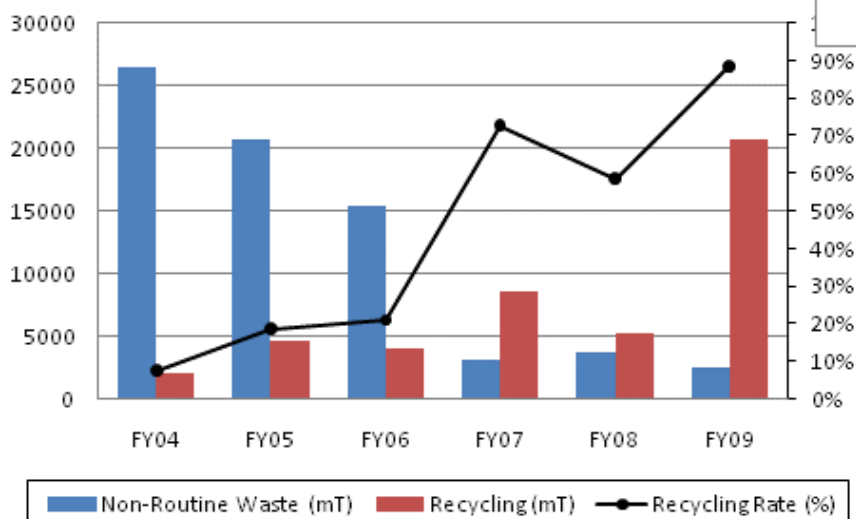
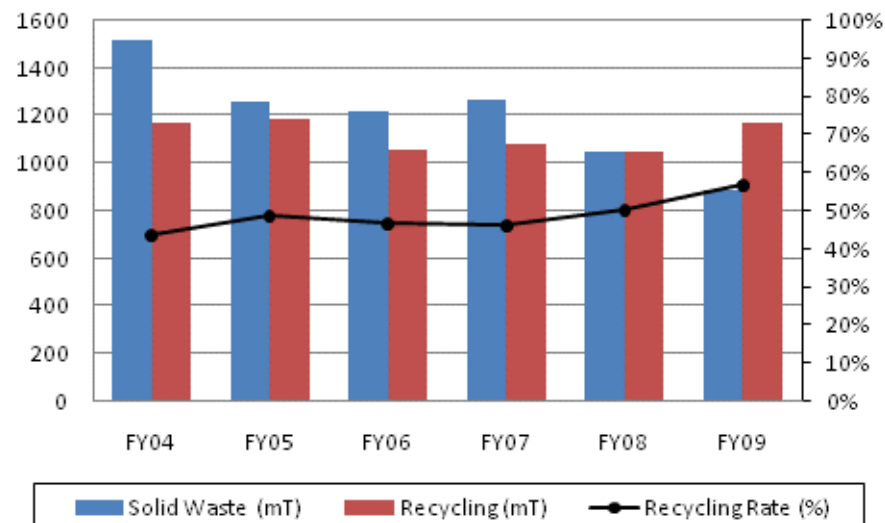


Scope of 2025 Goal

- **Commercial Solid Waste**
 - Office Waste
- **Industrial Solid Waste**
 - Non-hazardous laboratory & operations waste
- **Construction & Demolition Waste**
- ***Not in Scope:***
 - Hazardous Waste (RCRA)
 - Radioactive Waste



Recent Performance



What's Needed

- **Waste Characterization/Audits**

- At large & medium office buildings
- At on-site cafeteria
- At small office building (for LEED-EB®)
- Percentages (breakdown, recyclables), per capita

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Recycle Stream Assessment

- **Cardboard**
 - 25% was being recovered from trash rather than through recycle dumpsters
 - ... so...
 - Mapped all dumpsters (trash, MP, CB) in GIS
 - Removed excess trash dumpsters
 - Added more cardboard where missing
 - Upgraded cardboard dumpster sizes to reduce overflow to trash
 - Changed dumpster styles at docks for easy loading
- **Customers: custodial, SWTF, occupants**



Improvements



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Collection & Processing





Approaches – Construction & Demolition Waste

- Active monitoring on new construction projects
- Recycling infrastructure
 - C&D Recycle Center
 - Concrete and Asphalt Recycle Area
 - Deployable roll-offs and tilt hoppers
- Construction Specifications
- Known Problem
 - Untracked small remodel jobs

“The P2 Tent”

Installed June 2007

- Intended to stage electronics prior to recycle
- Now also used for:
 - Toner Exchange
 - Carpet and ceiling tile
 - Binder Exchange
 - Various plastics



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Foam Packaging Recycling



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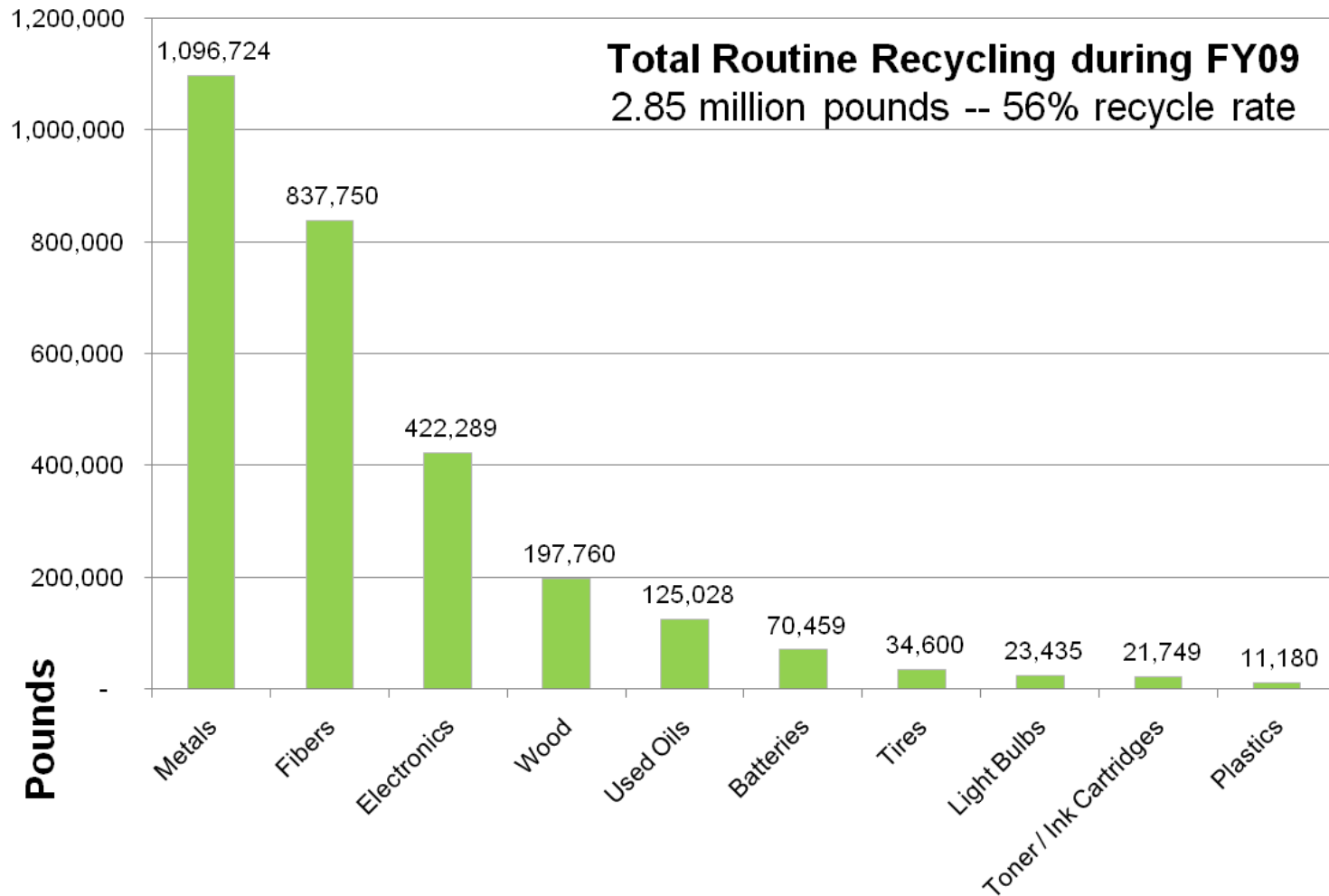
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Foam back to Foam

- **Heger Multi-Foam Compactor**
 - Compacts #4 LDPE, #5 EPP, #6 EPS
 - End product: 40-50 pound logs for palletizing
 - #6 & #4 collected



FY09 Recycling Statistics





Analysis

- **FY09 Recycling Opportunity Assessment**
 - ❖ **Status since FY04 ROA**
 - ❖ **Updated for new recycle streams**
 - ❖ **Now includes State and Federal regulated recycle streams**
 - ❖ **Action items, prioritized**
- **Please check out at**
- **http://p2.sandia.gov/R3_Recycle.htm**



Recycling Revenues

	First 8 months	Full year	Net (of KAFB proceeds)	Paper & Scrap Metal
FY10	\$ 128,176			86%
FY09	\$ 121,773	\$ 162,276	\$ 146,469	79%
FY08	\$ 177,393	\$ 232,063	\$ 190,032	93%
FY07	\$ 123,399	\$ 169,784	\$ 141,796	73%
FY06	\$ 108,374	\$ 150,054	\$ 134,247	84%

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Next steps

- **Have hired Recycling Field Tech full time**
 - Paid from recycling revenues
 - Get data and feedback
- **Design for improvement to SWTF**
- **Develop Project Plan for Zero Waste to Landfill**
 - Stakeholder and partners buy-in
 - Interim goals
 - Big Part is Sustainable Acquisition
- **Further waste characterization**
- **Social behavior challenges**